

### **Amendments to the Claims:**

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

1. (currently amended) A method of making a composite panel (100) of sandwich structure and provided with a hinge (106), said panel comprising a stack made up of at least one first skin (101) made of a reinforced thermoplastics material, of a cellular core (102) made up of a thermoplastic material, and of a second skin (103) made up of a reinforced thermoplastics material, in which method said panel (100) is formed by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature, said method being characterized in that, after said panel has been formed, forming a hinge (106) between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow~~ an incision (104) ~~relative to the thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

2. (previously presented) A method according to claim 1, characterized in that the incision (104) in said panel (100) is made about in the range 10 seconds to 30 seconds after said panel has been formed.

3. (previously presented) A method according to claim 1, characterized in that the incision (104) is made by means of a serrated blade (200) which, relative to the plane of said panel (100), firstly moves vertically only so as to penetrate into the skin (101) of said panel, and then moves vertically and horizontally back-and-forth so as to cut through the cellular core (102).

4. (previously presented) A method according to claim 1, characterized in that the incision (104) is made by means of two juxtaposed serrated blades (201, 202) which vibrate relative to each other while simultaneously moving downwards vertically relative to the plane of said panel (100) so as to penetrate into said panel by cutting through a skin (101) and through the cellular core (102) thereof.

5. (previously presented) A method according to claim 1, characterized in that the incision (104) is made in the formed panel while said panel is still in a forming mold.

6. (previously presented) A method according to claim 1, characterized in that the incision (104) is made in the formed panel outside a forming mold.

7-9. (canceled)

10. (previously presented) A method according to claim 1, characterized in that, prior to forming said panel (100) a pre-assembly constituted by the stack of at least the first skin (101), of the cellular core (102) and of the second skin (103) is heated.

11. (previously presented) A method according to claim 1, characterized in that, while said panel (100) is being formed, the first and second skins (101, 103) have a forming temperature lying about in the range 160°C to 200°C.

12. (previously presented) A method according to claim 1, said method being characterized in that the first and second skins (101, 103) are made up of glass fiber fabric and of the thermoplastics material.

13. (previously presented) A method according to claim 12, characterized in that the thermoplastics material is a polypropylene.

14. (previously presented) A method according to claim 1, characterized in that the cellular core (102) of the panel (100) has an open-celled structure of the tubular or honeycomb cell type.

15. (currently amended) A panel (100) of sandwich-type composite structure and comprising a stack made up of at least a first skin (101) made of a reinforced thermoplastic material, of a cellular core (102) made of a thermoplastics material, and of a second skin (103) made of a reinforced thermoplastics material, the panel being provided with at least one hinge, in which said panel (100) is made by implementing a method of forming said panel (100) by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature, said method being characterized in that, after said panel has been formed, forming a hinge (106) between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow an~~ incision (104) ~~relative to the thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

16. (currently amended) The method according to claim 1, wherein the ~~narrow~~ incision is a 0.5 mm incision.

17. (currently amended) The panel according to claim 15, wherein the ~~narrow~~ incision is a 0.5 mm incision.

18. (currently amended) The method according to claim 1, wherein the depth of the ~~narrow~~ incision is in a range of 80% to less than 100% of the thickness of the thickness of the cellular core and one of the first and second skins.

19. (currently amended) The panel according to claim 15, wherein the depth of the ~~narrow~~ incision is in a range of 80% to less than 100% of the thickness of the thickness of the cellular core and one of the first and second skins.

20. (currently amended) A method of making a composite panel (100) of sandwich structure and provided with a hinge (106), said panel consisting of a stack made up of three layers, wherein said three layers include a first skin (101) made of a reinforced thermoplastics material, a cellular core (102) made up of a thermoplastic material, and a second skin (103) made up of a reinforced thermoplastics material, in which method said panel (100) is formed by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature, said method being characterized in that, after said panel has been formed, forming a hinge (106) between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow an~~ incision (104) ~~relative to the thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

21. (currently amended) A panel (100) of sandwich-type composite structure and consisting of a stack made up of three layers, wherein said three layers include a first skin (101) made of a reinforced thermoplastic material, a cellular core (102) made of a thermoplastics material, and a second skin (103) made of a reinforced thermoplastics material, the panel being provided with at least one hinge, in which said panel (100) is made by implementing a method of forming said panel (100) by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature; said method being characterized in that, after said panel has been formed, forming a hinge (106) between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow an~~ incision (104) ~~relative to the~~

~~thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

22. (currently amended) A method of making a composite panel (100) of sandwich structure and provided with a hinge (106), said panel comprising a stack made up of at least one first skin (101) made of a reinforced thermoplastics material, of a cellular core (102) made up of a thermoplastic material, and of a second skin (103) made up of a reinforced thermoplastics material, in which method said panel (100) is formed by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature, said method being characterized in that, after said panel has been formed, forming a hinge (106) between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow~~ an incision (104) ~~relative to the thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, and the hinge consists of only the intact skin adjacent the core, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

23. ((currently amended) A panel (100) of sandwich-type composite structure and comprising a stack made up of at least a first skin (101) made of a reinforced thermoplastic material, of a cellular core (102) made of a thermoplastics material, and of a second skin (103) made of a reinforced thermoplastics material, the panel being provided with at least one hinge, in which said panel (100) is made by implementing a method of forming said panel (100) by pressing said stack at a high pressure lying in the range  $10 \times 10^5$  Pa to  $30 \times 10^5$  Pa, the first and second skins (101, 103) being preheated to a softening temperature, said method being characterized in that, after said panel has been formed, forming a hinge (106)

between two portions (107, 108) of said panel (100) at a predetermined place in said panel by cutting ~~only a narrow~~ an incision (104) ~~relative to the thickness of the panel~~ through one (101) of the first and second skins (101, 103), and substantially through the entire thickness of the cellular core (102), while leaving the other skin (103) intact, and the hinge consists of only the intact skin adjacent the core, wherein said cutting of said incision is of a force toward said cellular core (102) sufficient to produce deformation of said first skin (101) into said cellular core (102), and whereby said hinge provides for multiple flexures of the panel at said hinge.

24. (new) The method according to claim 1, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of the hinged portions (107, 108) having contact at the skin 103.

25. (new) The panel according to claim 15, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of separation of the hinged portions (107, 108) having contact at the skin 103.

26. (new) The method according to claim 20, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of the hinged portions (107, 108) having contact at the skin 103.

27. (new) The panel according to claim 21, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of the hinged portions (107, 108) having contact at the skin 103.

28. (new) The method according to claim 22, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of the hinged portions (107, 108) having contact at the skin 103.

29. (new) The panel according to claim 23, wherein the multiple flexures are in a range of 3 degrees to 45 degrees of separation of the hinged portions (107, 108) having contact at the skin 103.

30. (new) The method according to claim 1, wherein the deformation of said first skin is greater than the thickness of said first skin.

31. (new) The panel according to claim 15, wherein the deformation of said first skin is greater than the thickness of said first skin.

32. (new) The method according to claim 20, wherein the deformation of said first skin is greater than the thickness of said first skin.

33. (new) The panel according to claim 21, wherein the deformation of said first skin is greater than the thickness of said first skin.

34. (new) The method according to claim 22, wherein the deformation of said first skin is greater than the thickness of said first skin.

35. (new) The panel according to claim 23, wherein the deformation of said first skin is greater than the thickness of said first skin.

36. (new) The method according to claim 1, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

37. (new) The panel according to claim 15, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

38. (new) The method according to claim 20, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

39. (new) The panel according to claim 21, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

40. (new) The method according to claim 22, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

41. (new) The panel according to claim 23, wherein the deformation of said first skin is at an angle greater than 30 degrees into said core.

42. (new) The method according to claim 1, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.

43. (new) The panel according to claim 15, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.

44. (new) The method according to claim 20, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.

45. (new) The panel according to claim 21, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.

46. (new) The method according to claim 22, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.



47. (new) The panel according to claim 23, wherein said composite panel is formed inside of a mold, and the incision is made by means of at least one blade inside the mold while said composite panel is inside of the mold.

48. (new) The method according to claim 1, wherein said cutting further produces local crushing of said core.

49. (new) The panel according to claim 15, wherein said cutting further produces local crushing of said core.

50. (new) The method according to claim 20, wherein said cutting further produces local crushing of said core.

51. (new) The panel according to claim 21, wherein said cutting further produces local crushing of said core.

52. (new) The method according to claim 22, wherein said cutting further produces local crushing of said core.

53. (new) The panel according to claim 23, wherein said cutting further produces local crushing of said core.